

REMARKS/ARGUMENTS

Claims 7, 8, 15, 16, 23, and 24 were previously pending in the application. Claims 7, 8, 15, 16, 23, and 24 are amended herein. Assuming the entry of this amendment, claims 7, 8, 15, 16, 23, and 24 are now pending in the application. The Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

In the event that the Examiner believes that this amendment does not place the application in condition for allowance, the Applicant requests a telephonic interview between the Examiner and the Applicant's attorney Ian M. Hughes to discuss this amendment. The Applicant requests that the Examiner call Mr. Hughes (610-933-8809) to arrange a convenient time for such an interview.

In paragraphs 4 and 5, the Examiner rejected claims 7, 8, 15, 16, 23, and 24 under 35 U.S.C. 103(a) as being unpatentable over Sweitzer et al. (US Pat. No. 6,570,915, hereinafter "Sweitzer") in view of Feuser et al. (On the Effects of IEEE 802.3x Flow Control in Full Duplex Ethernet LANs, 1999; hereinafter "Feuser"). For the following reasons, the Applicant submits that claims 7, 8, 15, 16, 23, and 24 are allowable over the cited references.

Applicant's claim 7, as amended, recites:

"A self calibrating network having a plurality of nodes, comprising: a first node of said plurality of nodes to transmit a test signal and a network lock command, said network lock command ceasing nodes other than said first node and a second node of said plurality of nodes from communicating on said network. . . and wherein said first node transmits said test signal and said network lock command for subsequent nodes of said self calibrating network, each of said subsequent nodes adjusting said subsequent node transceiver to optimize said transfer of data between said first node and said subsequent node until receipt of a network unlock command . . . [emphasis added]."

As recited in Applicant's amended claim 7, a self calibrating network of a plurality of nodes has a first node that not only optimizes the transfer of data between first and second nodes, but performs this optimization for transfer between multiple pairs of subsequent nodes. For each of these optimizations, a network lock/unlock command pair is employed, keeping other nodes from accessing the network during the calibration process. Independent claims 15 and 23 are similarly amended herein. Support for these amendments may be found through the Specification as filed and, specifically, at page 9, line 11, through page 11, line 2, describing operation of the method of Fig. 3.

Sweitzer describes a DSL communication system of only two nodes, a DTC-C and a DTU-R in which the data rate of data transfer is negotiated based upon measured line quality (See, for example, Sweitzer at the Abstract. Sweitzer plainly describes a DSL system with only two nodes, and does not describe or suggest such technique for use in a multi-node network. In addition, Sweitzer does not describe or suggest the problem of calibrating a plurality of nodes interconnected in a network in which communication by another node would disrupt the calibration for data transfer between first and second nodes, which would exist only in a self calibrating network having at least three nodes. Consequently, there is no description of a problem requiring the use of network lock/unlock commands to prevent other nodes from accessing the network during the calibration process between first and second nodes. DSL systems are not multi-node networks, so there would be no motivation to modify the system of Sweitzer to be a self calibrating network of a plurality of nodes using network lock/unlock commands, as recited in applicants amended claim 7.

Feuser describes a flow control scheme between a switch (e.g., a first node) and a station (e.g., a second node) in an Ethernet LAN. Feuser describes flow control commands (network pause frames), namely XOFF/XON commands, to stop and start data transmission between the first and second nodes to prevent buffer overflow. As Applicant described in the previous response (4/9/08 Response), "Feuser only teach[es] a network pause frame for 'a decrease in the buffer occupancy'" and not "anything related to calibration of a node, much less a network lock command that prevents other nodes on a network other than a first node and a second node, from affecting a calibration result . . ." Feuser's communications are between communicating first and second nodes, and have no connection to other nodes in Feuser's network. Thus, no problem of interference by other nodes during calibration between first and second nodes exists in Feuser.

In Applicant's previous response, the Applicant respectfully requested that the Examiner provide support in the references for the use "of a pause frame for any reason" (4/9/08 Response). No such support is given. The Examiner's response is simply one that "it would be obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate Feuser's network lock command functionality in the nodes of Sweitzer's network in order to prevent other nodes from communicating during the calibration process, potentially interfering with the test results". Since Sweitzer's "network" is only two nodes, and neither Sweitzer nor Feuser describe the problem of multiple nodes accessing a network that might interfere with the calibration process between two of the nodes, Applicant's believe that the Examiner's obviousness rejection is based on the recognition of a problem by the Applicant and through use of hindsight.

Recognition of Problem by Applicant

The recognition by the Applicant of a problem in the prior art cannot be used against the Applicant to support a conclusion of obviousness. See, e.g., *In re Dow Chemical Co.*, 837 F.2d 469, 472, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) ("[A] patent applicant's statement of the purpose of the work [in the specification] is not prior art."); *In re Fout*, 675 F.2d 297, 300 n.2, 213 USPQ 532, 535 n.2 (CCPA 1982) ("Absent a statutory bar under 35 U.S.C. 102(b), (c) or (d), an applicant's own invention cannot be 'prior art' to him.").

Applicants submit that the Examiner employs Applicant's recognition of a problem, namely, that multiple nodes accessing a network might interfere with the calibration process between two of the nodes, to combine the Sweitzer reference with Feuser and to modify the XOFF/XON commands of Feuser to support a conclusion of obviousness. No such problem exists, requires solution, or is described in the Sweitzer and Feuser references. Consequently, Applicants submit that the Examiner's obviousness rejection requires impermissible use of recognition of the problem by the Applicant and respectfully request that the rejection be withdrawn.

Hindsight

Without a suggestion in the prior art for a necessary modification and/or combination, a rejection on the grounds of obviousness is an improper use of hindsight. Such hindsight reasoning is clearly an improper basis for the finding of obviousness. Further, if the prior art does not contain even a suggestion of the specific modifications that are needed to be made to the teachings of the prior art to yield the claimed invention, then a rejection on the grounds of obviousness based solely on the advantages provided by that claimed invention is an improper use of hindsight. See, e.g., *In re Fritch*, 972, F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) ("[I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious . . . This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'"); *Texas Instruments Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1178, 26 USPQ2d 1018,

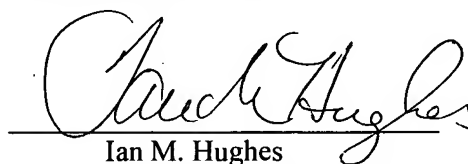
1029 (Fed. Cir. 1993) ("Absent . . . [a] suggestion to combine the references, respondents can do no more than piece the invention together using the patented invention as a template. Such hindsight reasoning is impermissible."); In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) ("As in all determinations under 35 U.S.C. section 103, the decision maker must bring judgment to bear. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps."); Symbol Technologies Inc. v. Opticon Inc., 17 USPQ2d 1737, 1746 (S.D.N.Y. 1990), aff'd, 935 F.2d 1569, 19 USPQ2d 1241 (Fed. Cir. 1991) ("That a technician, in hindsight, could combine elements known within the technology to produce the contested patent does not make the patent obvious to one skilled in the art at the time the patent was issued.").

Applicants submit that the Examiner also employs hindsight to combine the Sweitzer reference with Feuser and to modify the XOFF/XON commands of Feuser to support a conclusion of obviousness. The Sweitzer reference does not make any mention of the actions or processes of other nodes that might interfere with a calibration process in a network of nodes. The Feuser reference, while it speaks of a network, only describes actions between a pair of nodes for flow control, and does not describe or suggest modifying the actions of nodes other than the pair exchanging XOFF/XON commands to modify network activity, and certainly not for a calibration process. Consequently, Applicants submit that the Examiner's obviousness rejection requires impermissible use of hindsight to combine these references and respectfully requests that the rejection be withdrawn.

For all these reasons, the Applicant submits that claim 7 is allowable over Sweitzer and Feuser, either when taken alone or in combination. For similar reasons, the Applicant submits that claims 15 and 23 are also allowable over the cited references. Since claims 8, 16, and 24 depend variously from claims 7, 15, and 23, it is further submitted that those claims are also allowable over Sweitzer and Feuser, when taken alone or in combination. The Applicant therefore respectfully submits that the rejections of claims under Sections 103 have been overcome.

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Respectfully submitted,



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